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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE APPLICATION NO. 1349 04/26/2001 J. J. Garcia-Luna-Aceves 5543P006 09/844,856 **EXAMINER** 7590 08/17/2004 BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP CHANKONG, DOHM Seventh Floor PAPER NUMBER ART UNIT 12400 Wilshire Boulevard Los Angeles, CA 90025-1026 2152

DATE MAILED: 08/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/844,856	GARCIA-LUNA-ACEVES ET AL.
Office Action Summary	Examiner	Art Unit
	Dohm Chankong	2152
The MAILING DATE of this communication Period for Reply	1	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, - If NO period for reply is specified above, the maximum statutory properties of the period for reply within the set or extended period for reply will, by some Any reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a rown. a reply within the statutory minimum of third eriod will apply and will expire SIX (6) MON statute, cause the application to become AB	reply be timely filed by (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 2	23 April 2002.	
2a) ☐ This action is FINAL . 2b) ☒	This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) ⊠ Claim(s) 1-14 is/are pending in the application 4a) Of the above claim(s) is/are with 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-14 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction a	ndrawn from consideration.	
Application Papers		
9) The specification is objected to by the Exa	miner.	•
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the co		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a	nents have been received. nents have been received in A priority documents have been ureau (PCT Rule 17.2(a)).	application No received in this National Stage
Attachment(s)		
1) Notice of References Cited (PTO-892)		Summary (PTO-413)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-94t 3) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date 4.11/2001 5,4/2002. 	"	s)/Mail Date nformal Patent Application (PTO-152)

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DETAILED ACTION

I> Claims 1-14 are presented for examination,

Claim Rejections - 35 USC & 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

- 3> Claims 1-14 are rejected under 35 U.S.C 102(e) as being unpatentable over McCanne et al, U.S Patent No. 6.415.323 ["McCanne"].
- 4> As to claim 1, McCanne discloses a method, comprising:

receiving a request for an information object at an address identified by a uniform resource locator (URL) [column 15 lines 59-60>]; and

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mapping the URL to a corresponding anycast address for the information object [column 15 <lines 59-65>].

- As to claim 2, McCanne discloses the method of claim 1 further comprising using resolving the anycast address for the information object to a unicast address for the information object [column 10 clines 36-43> and column 16 <lines 9-12 and 27-29>].
- 6> As to claim 3, McCanne discloses the method of claim 2 further comprising sending the information object to the client [column 16 < lines 9-12>].
- As to claim 4, McCanne discloses the method of claim 3 wherein the request is received at an information object repository that is topologically closer to the client than any other information object repository [claim 10 where: the nodes in the anycast group are equivalent to an information object repository].
- As to claim 5, McCanne discloses the method of claim 4 wherein the information object repository is selected according to specified performance metrics [column 17 < lines 48-58 and claim 8].
- As to claim 6, McCanne discloses the method of claim 5 wherein the performance metrics comprise one or more of: average delay from the selected information object repository to a source of the request, average processing delay at the selected information

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object repository, reliability of a path from the selected information object repository, available bandwidth in said path, and loads on the selected information object repository [column 17 < lines 48-58 and claim 8].

- As to claim 7, McCanne discloses an information object repository configured to map a uniform resource locator (URL) for an information object to a network layer anycast address [column 14 line 61> to column 15 line 33>].
- As to claim 8, McCanne discloses the information object repository of claim 8 being further configured to advertise anycast address using a network layer anycast routing protocol [column 12 clines 44-54> and column 20 <lines 40-52>].
- Claim 9 is a claim to for a network with elements that perform the steps of the method of claim 1. Therefore, claim 9 is rejected for the same reasons as set forth in above paragraph 4, for claim 1.
- Claim 10 is a claim for a network with an element that performs the step of the method of claim 2. Therefore, claim 10 is rejected for the same reasons as set forth in above paragraph 5, for claim 2.

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- Claim II is a claim for a network with an element that performs the step of the method of claim 4. Therefore, claim II is rejected for the same reasons as set forth in above paragraph 7, for claim 4.
- As to claim 12, McCanne discloses the network of claim 11 further comprising a Web router configured to select the information object repository that is closer to the requesting client than any other of the number of information repositories in the network without regard as to whether the information object is actually stored at the selected information object repository [column 19 < lines 14-26> and column 20 < lines 55-58>].
- Claim 13 is a claim for a network with an element that performs the step of the method of claim 5. Therefore, claim 13 is rejected for the same reasons as set forth in above paragraph 8, for claim 5.
- Claim 14 is a claim for a network with an element that performs the step of the method of claim 6. Therefore, claim 14 is rejected for the same reasons as set forth in above paragraph 9, for claim 6.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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The following patents are cited to further show the state of the art in regards to anycast networks:

U.S Patent No. 5.822.320 to Horikawa et al;

U.S Patent No. 6.236.652 to Preston et al;

U.S Patent No. 6.687.731 to Kavak;

U.S Patent No. 6.721.291 to Bergenwall et al.

The following non-patent literature is cited to further show the state of the art in regards to network layer unicast:

Basturk, Erol, Engel, Robert, Haas, Robert, Peris, Vinod, and Saha, Debanjan. "Using Network Layer Anycast for Load Distribution in the Internet", IBM Research Report, 07.29.1997.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (703)305-8864.

The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DC

JOHN FULLANDBEE

-SUPERVISORY PATENT EXAMINER
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